

Disfluency and sentence complexity in autism: A case study

Emma Rizzuto, Kathleen Scaler Scott Ph.D., CCC-SLP, BCS-F, and Erik X. Raj Ph.D., CCC-SLP Monmouth University, West Long Branch, New Jersey, USA

BACKGROUND:

The relationship between stuttering and sentence complexity has been studied with mixed results (see Buhr & Zebrowski, 2009, for review). It has been established that children with autism may exhibit disfluency, including stuttering and nonstuttering like disfluencies (SLDs; NSLDs), cluttering and/or atypical disfluency (AD) (Scott et al., 2014). Non-stuttering like disfluency has been shown to indicate <u>difficulties with</u> <u>formulation</u>, especially for <u>more complex</u> <u>sentences</u> (Yaruss et al., 1999). The relationship between disfluency and complexity of sentences in the autistic population specifically has not yet been studied.

PURPOSE:

To understand the relationship between disfluency and complexity of sentences in the autistic population. Results will help add to the database of literature to better inform assessment and treatment within the autistic population.

METHODS:

- In-depth analysis of a 16-year-old with autism
- Sentences from a five-minute monologue were coded for syntactic complexity and disfluency
- Types of disfluency included stuttering-like disfluencies (SLDs; i.e., part-word repetitions, single syllable whole word repetitions with tension, prolongations, blocks); non-stuttering like disfluencies (NSLDs; i.e., word repetitions without tension, phrase repetitions, revisions, interjections); atypical disfluencies (ADs; i.e., word-final disfluencies, mid-word insertions, broken words); cluttering (i.e., atypical pausing, over-coarticulation).

The frequency of disfluency overall increased with increased complexity of sentence structure.

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For more information or references, please contact: kscott@monmouth.edu

PRELIMINARY RESULTS:

Results of the analysis revealed that the frequency of disfluency overall (including SLDs, NSLDs, ADs and cluttering) increased with increased complexity of sentence structure. The majority of the disfluencies associated with increased sentence complexity were those other than SLDs. Overall, the majority of the participant's sentences were simple, although compound and complex sentences seemed to be emerging, as indicated by a small number of these sentence types identified within the monologue.

DISCUSSION:

The presence of non-stuttering like disfluency has been shown to suggest difficulties with language formulation (Yaruss et al., 1999). This has been found to be especially true for more complex sentence structures. Given that the analysis for the current study resulted in increased disfluency trending with increased sentence complexity, results indicate a potential connection between language formulation difficulties (e.g., difficulties with planning and/or syntactic development of ideas) and disfluency in autism. If language difficulties were to underlie disfluency in autism, implications for assessment and treatment might focus more in the areas of language, which is different from existing protocols of stuttering assessment and treatment. Further research is needed in larger samples to confirm this pattern in autism spectrum disorders.